

In the United States
Circuit Court of Appeals
For the Ninth Circuit.

Wilson-Western Sporting Goods Co.,
a corporation,

Appellant and Cross-Appellee,

vs.

George E. Barnhart,

Cross-Appellant and Appellee.

BRIEF FOR APPELLANT AND
CROSS-APPELLEE.

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No. 7807

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George E. Barnhart,

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BRIEF FOR APPELLANT AND
CROSS-APPELLEE.

This is an appeal from a decree holding claims 11 and 12 of the Barnhart Patent No. 1,639,547, and claim 10 of the Barnhart Patent No. 1,639,548, valid and infringed.

A cross-appeal is taken by Cross-Appellant and Appellee from the decree holding that claim 10 of Letters Patent No. 1,639,548 is not infringed by the construction of golf club illustrated by Plaintiff's Exhibit 3.

The patents in suit are for golf clubs, and of these patents it is said:

“At first glance it would appear that the flaring of the outer portion of the socket would be an obvious way in which to distribute the strain at the point of juncture of the shaft and hosel.”

[Report of Special Master,
Record, p. 154.]

This suit was tried before a Master in Chancery, David B. Head, under an order entered April 5, 1934, directing him to take and hear the evidence, make conclusions as to the facts in issue, and record the judgment to be entered thereon, reserving to the court the full power to review to which order of reference defendant-appellant and cross-appellee excepted. [Record, p. 27.]

Pursuant to the reference, the Special Master heard the testimony, arguments of counsel, and made his report [Record, pp. 149-159] to the judges of the District Court for the Southern District of California. Under Equity Rule 66 exceptions were taken by defendant-appellant and cross-appellee to the recommendations of the Special Master. [Record, pp. 160-161.]

Plaintiff cross-appellant and appellee filed exceptions to the Report of the Special Master with respect to the holding of non-infringement of claim 10 of Letters Patent No. 1,639,548 by the structure of the golf club as illustrated by Plaintiff's Exhibit 3. [Record, p. 162.]

A hearing was had before the Honorable Paul J. McCormick, District Judge, at which hearing the Honorable Paul J. McCormick overruled the exceptions taken by both plaintiff and defendant and confirmed the report of the Special Master.

Hereafter in this brief appellant and cross-appellee will refer to the parties as they were designated before the District Court, i. e., appellant and cross-appellee as "defendant", and cross-appellant and appellee as "plaintiff".

Defendant brings this appeal upon the assignment of errors [Record, p. 170], the substance of which assignment of errors presents to this Honorable Court for its

consideration defendant's contention that the District Court erred.

(1) In holding the Barnhart Patent No. 1,639,547, and claims 11 and 12 thereof, to be infringed by the defendant's structure as illustrated on page 4 of the 1930 catalogue, Plaintiff's Exhibit 8-B;

(2) In holding that the Barnhart Patent No. 1,639,548, and claim 10 thereof, to be infringed by the defendant's structure as illustrated on page 4 of the 1930 catalogue, Plaintiff's Exhibit 8-B;

(3) In holding the Barnhart Patent No. 1,639,547, and claims 11 and 12 thereof, to be valid;

(4) In holding that the Barnhart Patent No. 1,639,548, and claim 10 thereof, is valid;

(5) In not holding that the defendant's structure as illustrated on page 4 of the 1930 catalogue, Plaintiff's Exhibit 8-B, is not of the construction as illustrated in the Barnhart Patents Nos. 1,639,547 and 1,639,548, and does not have the mode of operation allegedly produced in the use of the golf clubs of the two Letters Patent in suit to infringe claims 11 and 12 of the Barnhart Patent No. 1,639,547, and claim 10 of the Barnhart Patent No. 1,639,548.

The cross-appeal taken by defendant in substance is that the District Court erred in not holding that claim 10 of the Letters Patent No. 1,639,548 is infringed by the structure of golf club illustrated by Plaintiff's Exhibit 3.

Barnhart Patent No. 1,639,547.

The Barnhart Patent No. 1,639,547 relates to a golf club and the manner of securing a golf club head to a steel shaft. The general object of the Barnhart Patent No. 1,639,547 is to secure a steel shaft to a golf club head in such a manner as to permit of greater freedom of torsional twist and longitudinal movement of the shaft within the ferrule or "hosel" of the club head. Barnhart says:

"Steel or other metal shafts, as heretofore constructed, provide less longitudinal flexibility than wooden shafts and very little torsional flexibility and resiliency." (Barnhart Patent No. 1,639,547, p. 1, lines 13-15.)

Barnhart attempted to overcome this alleged difficulty by

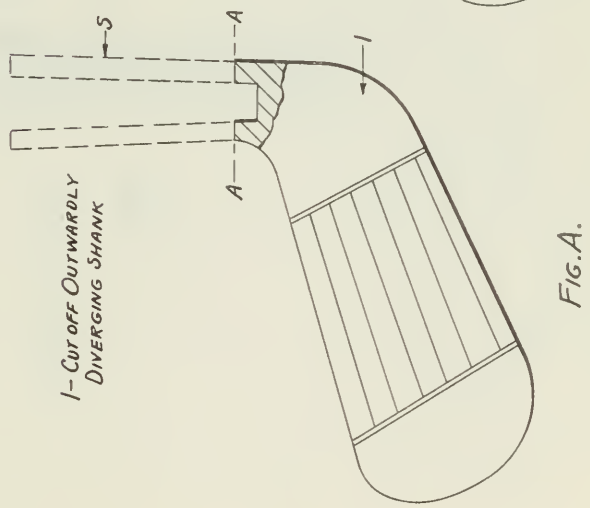
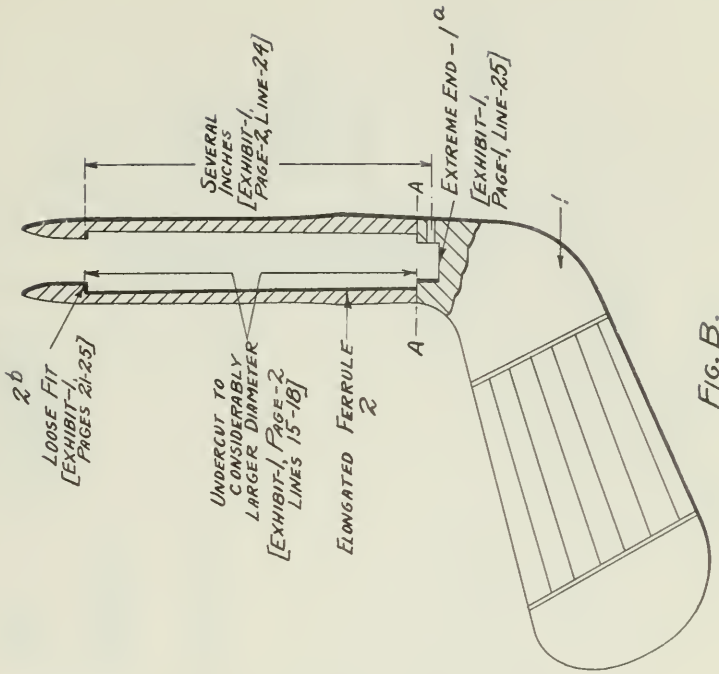
(1) taking an ordinary steel head 1 and shaft 3 and cutting off the outwardly diverging shank as illustrated in dotted lines in Figure 1, and securing in its place an *elongated ferrule 2*.

(2) By securing the *extreme end* of the shaft 3 to the club head within the interior of the ferrule 2.

(3) By providing within the ferrule 2 of the club head a *chamber 2^a* to permit the *free movement* of the shaft 3 within the interior of the ferrule 2; and

(4) By providing a restriction, 2^b, within the chamber several inches from the extreme end of the shaft 3 which *loosely engages* the shaft 3.

(5) By *weakening the section of the shaft 3* within the chamber 2^a, as by forming slots 3^a, to permit of greater torsional and longitudinal flexibility.



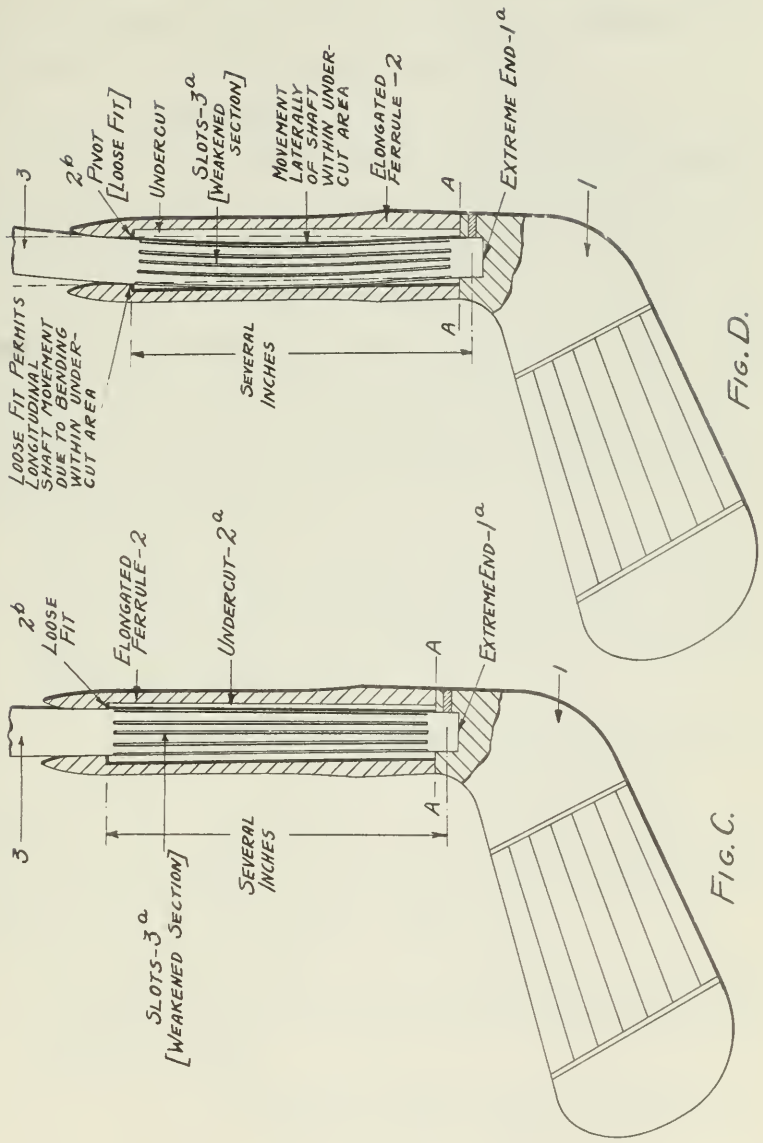


FIG. D.

FIG. C.

The Barnhart Patent No. 1,639,547 illustrates the manner of connection of the steel shaft 3 to the club head 1 as illustrated in the following figures A to D:

First: As illustrated in Figure A, the Barnhart Patent No. 1,639,547 states that the outwardly diverging shank S of the club head 1 is cut off at the line A in Figure A. (Barnhart Patent 1,639,547, p. 1, line 98; p. 2, line 11.)

Second: An elongated ferrule 2 is provided in the place of the outwardly diverging shank S. (a) The elongated ferrule 2 is undercut as illustrated at 2^a. (b) The elongated ferrule 2 is provided on its interior with a constricted portion 2^b which will loosely engage the shaft, as illustrated in Figure B.

“The upper end of the bore of the ferrule, indicated by 2^b, is considerably constricted and *loosely engages* the rod or shaft 3 several inches from its lower end for reinforcing the shaft.”

(Barnhart Patent No. 1,639,547, p. 2, lines 21-25.) (Italics ours.)

Third: (1) The shaft 3 is fitted to the ferrule 2 by securing the shaft 3 to the ferrule 2 at the *extreme end* 1^a of the shaft 3 as illustrated in Figure C.

“second, to provide a golf club having a steel shaft in which the shaft is secured at its *extreme end* to the head of club . . .”

(Barnhart Patent No. 1,639,547, p. 1, lines 23-26.) (Italics ours.)

The intended mode of operation of this assembly as stated by Barnhart, is as illustrated in Figure D.

(1) The shaft 3 is free to move torsionally and longitudinally within the undercut 2^a.

(2) The shaft is weakened by forming of the longitudinal slots 3^a in the portion of the shaft within the undercut 2^a of the ferrule 2.

(3) The shaft is secured at its *extreme end* to the head 1 or ferrule 2 “*several inches*” from the loosely fitting constriction 2^b.

When the head 1 strikes a golf ball, the weakened portion of the shaft 3 permits the shaft to turn at its weakened section. The weakened section of the shaft 3 likewise permits the shaft 3 to bend at its weakened section within the chamber 2^a. The elongated ferrule 2 is undercut to provide the chamber 2^a within which the shaft 3 bends above its extreme end. Several inches from the extreme end the constriction 2^b loosely engages the shaft 3 to permit the shaft 3 to move freely as it moves inwardly into the chamber 2^a due to the effects of bending and the effect of twisting. This action is testified to by the patentee, Barnhart, where he states:

“That is, the purpose of that weakening of the section of the shaft and the cutting out of that chamber or socket, as shown in Figure 3, is to permit the club shaft to bend somewhat in the manner you have sketched it in dotted lines on a copy of my patent; that in combination with torsioning effect.”

[Record, page 45.]

Defendant's expert, William A. Doble, defines this action:

“Therefore, in this club of Plaintiff's Exhibit 1, it necessarily requires, to carry out the teachings and disclosures of the patent, and it is so disclosed in the patent, that the shaft is only secured to the golf head, the club head I mean, at the extreme end of the shaft.

where it is inserted into the tapered chamber 1a' and is secured there by brazing or some similar means. The shaft above this point, in the weakened section, will therefore twist and allow the upper end of the hosel to rotate about and with respect to the shaft, and as the shaft is tapered and as this helical twisting takes place in the weakened section of the shaft, it tends to shorten the shaft and draw it within the upper end of the hosel, that is the portion 2^b; and therefore, as this shaft is tapered, there must be freedom of space between the shaft and the bore of the upper portion of the hosel. In other words, it must be a free, loose fit, or otherwise the shaft could not function as proposed, and the portion 2b' of the hosel is presumed to provide a fulcrum or pivot around which the shaft, acting as a lever, will turn."

[Record, pages 83-84.]

Barnhart Patent No. 1,639,548.

The Barnhart Patent No. 1,639,548 illustrates a golf club of a form similar to that illustrated in the Barnhart Patent No. 1,639,547. The differences are

(1) That in the place of the straight, longitudinal slots formed in the shaft 3 of the golf club of the Barnhart Patent No. 1,639,547, the second Barnhart Patent No. 1,639,548, illustrates the slots as formed helically in the shaft within the chamber 2^a of the hosel or elongated ferrule of the golf club, and

(2) In order to keep moisture, water and dirt from entering the chamber 2^a, there is illustrated in Figure 6 of the patent a flexible cap sleeve or band 5 which surrounds the outer portion of the ferrule 2 and the shaft 3

at the point where the shaft 3 emerges from the elongated ferrule 2.

With respect to this difference, Barnhart states:

“In Fig. 6 of the drawings, I have shown a flexible cap, sleeve, or band 5, around the joint between the outer end of the ferrule and the shaft for excluding dirt, dust and grit from entering the ferrule and lodging between the same and the shaft and thus preventing proper co-action between the same. The sleeve 5 is preferably made of rubber in tapered form and is positioned with its thick end around the end of the ferrule, and the thin or fin end around the shaft. Thus, the shaft is permitted to flex, twist and expand relative to the ferrule and still exclude dirt, dust and grit therefrom. It will be noted that a similar sleeve may be positioned around the joints of the ferrules and shafts shown in Figures 3, 4 and 5, or a cap, or washer may be positioned within the end of the ferrule around the shaft.”

(Barnhart Pat. No. 1,639,548, p. 2,
lines 101-119.)

As illustrated, the Barnhart Patent No. 1,639,548 differs only from the earlier Barnhart Patent No. 1,639,547 in the showing of helical slots and the showing of a rubber sleeve 5 between the end of the ferrule 2 and the shaft 3 for preventing dirt, moisture and grit from entering the chamber 2^a.

As to this second Barnhart Patent No. 1,639,548, the Special Master's Report states:

“It appears that the claim should be limited to the use of a sealing member in a structure where the shaft and socket are relatively moveable in the manner disclosed by the patent.” [Record, p. 155.]

The Barnhart Patents Nos. 1,639,547 and
1,639,548—Paper Patents.

The Barnhart Patents Nos. 1,639,547 and 1,639,548 are paper patents. This fact is established by the testimony of the patentee Barnhart who states:

“As to whether I ever manufactured any club for the market of the character as disclosed in either of my patents in suit, I made them for the purpose of demonstrating the principle only. I made some clubs. I never endeavored to sell any such clubs.

“I have endeavored to obtain some manufacturer of golf clubs or golf shafts who would take a license under my patents. As to whether any such party has ever taken any such license, the Wilson-Western Sporting Goods Company have tentatively opened up negotiations. They made the request to supply them with a price in the matter. They did not, however, take a license and no one else has taken any. As to whether I have submitted the matter in the same manner to Spaldings, Spaldings are probably affected quite differently than Wilson-Western.”

[Record, p. 46.]

Not only are the Barnhart patents in suit merely paper patents, but they do not teach the art any step forward in connection with the construction of a steel shaft club. The alleged problem, the Barnhart patents state, is to secure a steel shaft to a golf head in a manner to provide greater flexibility and resiliency, both longitudinally and torsionally, in such a manner as to eliminate the breakage of the shafts at the point of joinder of the shafts with the heads. Barnhart states:

“In golf clubs now in use, the shafts are made of wood as well as of steel tubing. Although the golf clubs with wooden handles provide greater flexibility and resiliency both longitudinally and torsionally, the same *break frequently* at the portions directly secured to the heads.”

(Barnhart Patent No. 1,639,547, p. 1,
lines 4-13.) (Italics ours.)

Further Barnhart states:

“second, to provide a golf club having a steel shaft in which the shaft is secured at its *extreme end* to the head of the club and reinforced intermediate its ends near its secured end in the form of a pivot means adapted to take the initial bending moment and considerably relieve the danger of breaking of the shaft from the head immediately at the secured portion;” (Barnhart Patent No. 1,639,547, p. 1,
lines 23-31.) (Italics ours.)

The second Barnhart Patent No. 1,639,548, states:

“and, tenth, to provide a means of this class which is simple and economical of construction, durable and which will not readily deteriorate.”

(Barnhart Patent No. 1,639,548, p. 1,
lines 61-64.)

That Barnhart did not solve the alleged problem he thus set out to solve is established. Barnhart states:

“I don't believe I have those clubs at the present time. I have had breakage of the shafts. As to whether there was considerable breakage with those shafts and those club heads, in the spiral there was quite a problem in overcoming breakage,”

[Record, p. 47.]

It is asserted by the plaintiff that the golf clubs of Plaintiff's Exhibit 3 and of the structure illustrated on page 4 of the 1930 catalogue, Plaintiff's Exhibit 8-B, infringe the patents in suit; therefore, that these clubs are constructed in accordance with, and have the same mode of operation as do the clubs constructed as illustrated in the two Barnhart patents in suit. The record shows that the structure of club illustrated on page 4 of the 1930 catalogue, Plaintiff's Exhibit 8-B, has been abandoned by defendant because the breakage of shafts was so great as to render the construction impractical; and secondly, that the breakage of the shafts of the clubs constructed as illustrated by Exhibit 3 is so great that defendant is now offering for sale a different club of an entirely different construction where the shaft is rigidly and positively secured to the head. The model of defendant's clubs as actually taken from the shelves of the Wilson-Western Sporting Goods Company is offered in evidence as Defendant's Exhibit "H". Horace E. Gillette, manager of the Wilson-Western Sporting Goods Company, Los Angeles Branch, testified:

"With this club Defendant's Exhibit H and of this same construction, the Wilson Company has some difficulty with shaft breakage. In most cases the shaft breaks about a quarter of an inch below the top of the hosel." [Record, p. 55.]

As between the clubs of defendant's construction those which have the rubber bushing between the hosel and the shaft break more frequently than the clubs which do not have the rubber, but where the shaft is merely a driven tapered fit.

Thomas J. Flynn, Assistant Branch Manager of the Wilson-Western Sporting Goods Company, Defendant's Los Angeles Branch, who controls the ordering of merchandise and the matter of adjustment with respect to defective merchandise, testified:

“The difference in the breakage between those clubs that do and those which do not have the rubber in there is that the ones with the rubber break more frequently, than those without it.”

[Record, pp. 67-68.]

It is therefore evident that the theoretical teachings of the patents in suit in so far as they relate to, if at all, defendant's structures, is that they have not taught the elimination, or even an improvement, in the condition of shaft breakage. The new club of the Wilson-Western Sporting Goods Company, defendant, that is, the Oggmented club, in order to overcome this problem of shaft breakage, has the shaft formed with a bulge at the point of joinder of the shaft and hosel of the club head so as to place a greater strength of material at this point of weakness and the shaft is sweated firmly into the hosel to produce substantially a solid metal construction.

“This Oggmented club that I have been testifying about really first appeared the latter part of last year, when we usually get our new golf club models for the ensuing year. At that time we had samples only. They really didn't have much sale until lately. In other words, it has just gone on the market this year. That high powered Croydon type that I have referred to is not a straight steel shaft. It is a shaft that is constructed in the same design of the original hickory shaft, that is to say, it is large at the top and tapers

down to its smallest diameter within three or four inches of where it enters the hosel; and at that point it enlarges until it gets to the hosel and then it tapers off small again to fit into the hosel of the head. In fact, it has quite a bulge right above the hosel. That is not a new feature this year. We had that last year but not in the Oggmented club. We had it in the professional Special.” [Record, p. 66.]

“In clubs made with those shafts, the shaft is sweated or soldered to the club head and then pinned.” [Record, p. 65.]

The patents in suit are mere paper patents. They are based upon a mere theory or idea and have never had any practical use whatsoever. Plaintiff has never marketed any of the clubs of the construction therein illustrated. The major club manufacturers have all turned the patents down as being for an impractical idea.

As this Honorable Court said in *Henry v. City of Los Angeles*, 230 Fed. 457 at 461; the patents under such circumstances are not entitled to a liberal application of the rule of equivalents but must be narrowly construed:

“The argument thus made by complainant concerning the patents in the prior art applies to the foregoing facts concerning the patent in suit and defendant’s device, notwithstanding that defendant’s machine has never been patented. The defendant has a successful machine; complainant has a patent on an idea or theory. Under such circumstances complainant is not entitled to that liberal application of the rule of equivalents that a patent is entitled to where the invention was the first to produce a new and useful result.”

The patents in suit and each of the claims thereof charged to be infringed, *i. e.*, each of claims 11 and 12 of the Barnhart Patent No. 1,639,547, and claim 10 of the Barnhart Patent No. 1,639,548, call for the shaft being secured to the club head at one end of the shaft. Claim 11 says:

“the latter being secured at its one end within the inner portion of the socket,”

Claim 12 says:

“the latter being secured at its one end within the inner portion of the socket,”

and claim 10 says:

“a shaft secured at one end within said socket.”

What is meant by “one end” is clearly set forth by Barnhart in the statement of his invention wherein he states:

“second, to provide a golf club having a steel shaft in which the shaft is secured at its extreme end to the head of the club.”

(Barnhart Patent No. 1,639,547, p. 1,
lines 23-26.)

This refers to the illustration contained in each of the Barnhart patents of the securing means 1^a in Figure 1 of the Barnhart Patent No. 1,639,548, and likewise in Figure 1 of the Barnhart Patent No. 1,639,547, wherein the extreme end of the shaft is brazed or otherwise secured to the club head. No contention is made that Barnhart has ever sold or offered for sale a club of this construction. Defendants never used a club wherein the extreme end of

the shaft is secured to the club head. The manner in which defendants secured their club shafts to the club head renders such securing impossible. Horace E. Gillette, manager of defendant's store in Los Angeles, testified:

"My attention being called to Defendant's Exhibit H and holes in the hosel, that is, what might be called a single hole extending from one side through to the other, that is to receive a rivet. It would make a difference in the function of the rivet if that hole for the rivet was a half an inch lower than it is here. It would crack the shaft if you put it any lower. I say that because we tried it. The factory tried quite a few of them that way. I know that of my own knowledge. I did not see them try it, but I have seen some clubs made that way and in nearly every instance the shaft cracked at the end because there was nothing to hold it." [Record, pp. 58-59.]

No use has been made of the allegedly novel conceptions or theories of the Barnhart patents in suit by either plaintiff or defendant. Plaintiff has abandoned the construction of the patents in suit and does not even contend that a club made in accordance with the theory of his patent will overcome the difficulties which he sought to solve. Barnhart's allegedly novel ideas and theories have never had a place in the practical art and have added nothing to golf club manufacture. Clearly therefore the claims sued upon are invalid.

In the case of *Chapman Dehydrater Co. v. Crenshaw*, 65 Fed. (2d) 69, at page 72, this Honorable Court was dealing with a similar circumstance and held:

"We have referred to the most recent dehydrating plants constructed by the parties merely for the pur-

poses of indicating that, if the patentee ever believed that there was any virtue in the patent claim with reference to the equal size of the dehydrating and furnace chambers, the owner of the Puccinelli patent has abandoned that construction, and the appellee and cross-appellant has not undertaken to use the idea. We conclude that claims 1 and 2 of the Puccinelli patent are not new or novel, do not constitute invention, and are anticipated by the prior patents herein-before referred to.”

Defendant's Structures.

The defendant's structures here involved are illustrated by page 4 of Defendant's 1930 catalogue, Plaintiff's Exhibit 8-B, and by Plaintiff's Exhibit 3, a further illustration of which is offered as Defendant's Exhibit H. A comparison of the structure of the Barnhart patents in suit with defendant's structure shows that defendant has not in any way followed any teaching or theory of either of the Barnhart patents in suit. *First*, there is no allegation of, or showing, that defendant has utilized the teaching of taking an ordinary steel head and cutting away the outwardly diverging shank and substituting therefor an elongated ferrule 2 as illustrated by Figures A and B hereof. *Second*, in defendant's structure the club shaft is not secured at its extreme end to the head 1 within the interior of the ferrule 2. *Third*, there is no loosely fitting constriction spaced several inches from the point of securing of the shaft to the club head providing a loose fit permitting movement of the shaft as it bends or twists within the interior of the shaft ferrule or hosel. *Fourth*. There is no weakening of the club shaft within the interior of the hosel to permit the shaft to have a greater torsional

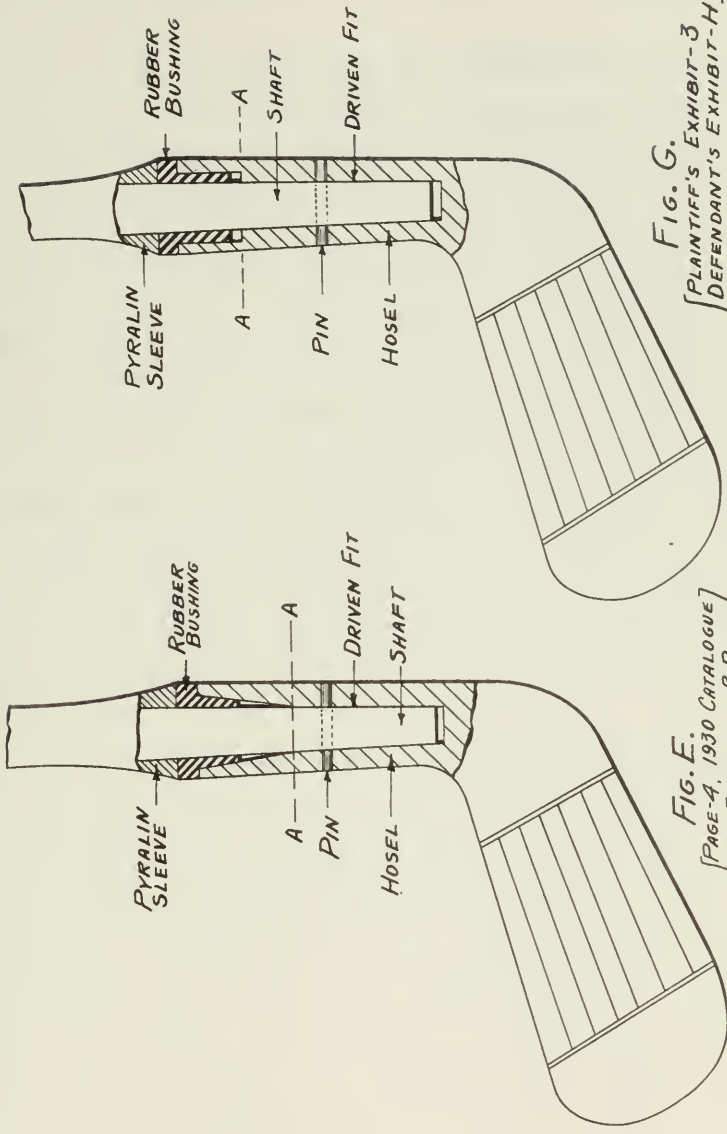


FIG. G.
[PLAINTIFF'S EXHIBIT-3
DEFENDANT'S EXHIBIT-H]

FIG. E.
[PAGE-4, 1930 CATALOGUE
EXHIBIT - B.B]

The first part of the paper discusses the general theory of the subject, and the second part discusses the application of the theory to the case of the present case. The theory is based on the assumption that the system is in a state of equilibrium, and the application of the theory to the case of the present case is based on the assumption that the system is in a state of equilibrium.

The theory is based on the assumption that the system is in a state of equilibrium, and the application of the theory to the case of the present case is based on the assumption that the system is in a state of equilibrium. The theory is based on the assumption that the system is in a state of equilibrium, and the application of the theory to the case of the present case is based on the assumption that the system is in a state of equilibrium.

or longitudinal flexibility as set forth in the Barnhart patents in suit.

Defendant does not use either the longitudinal slots of the Barnhart Patent No. 1,639,547 or the spiral slots of the Barnhart Patent No. 1,639,548. Within the interior of the hosel or ferrule of defendant's club there is no undercut providing a chamber within which the shaft is permitted to move to permit bending of the shaft or twisting thereof under a torsional strain. The construction of defendant's shaft as illustrated on page 4 of Plaintiff's Exhibit 8-B, Defendant's 1930 catalogue, shows that the hosel of the club is tapered from one end to the other; its smallest end being at the lower end of the tapered hole in the hosel or ferrule of the club head. The lower end of the shaft has a complementary taper. The shaft is driven into the hosel so that there is a tight fit maintained at all times between the hosel or ferrule of the club head and the shaft.

In order to insure the maintaining of this tight driven fit, a pin is driven through a hole positioned substantially midway between the ends of the ferrule of the club head, which pin passes through the shaft, tying the shaft in position and maintaining the driven metal to metal contact between the metal of the ferrule and metal of the shaft at all times. There can be no movement of the shaft within the hosel of the club head. The shaft is not secured at its extreme end to the ferrule or club head. No torsional twist of the shaft within the ferrule with relation to the shaft can occur in defendant's construction.

In order to ornament the club, a rubber bushing is inserted in a socket formed in the upper end of the ferrule and between the ferrule and the shaft. This rubber

bushing performs no function whatsoever in defendant's construction except possibly to protect the pyralin sleeve wrapped around the steel shaft at the lower end of this sleeve and likewise to ornament the appearance of the assembly. It does not reduce the breakage of the shafts and it has no other function. The shaft is secured tightly in position. Any bending of the shaft with relation to the ferrule occurs at the end of the driven fit between the tapered hosel and the tapered shaft. It is at this point where breakage occurs, except in cases of defective shaft construction.

The entire theory or principle upon which Barnhart predicates his claim to invention is lacking from defendant's structure as illustrated in Figure 4 of Defendant's 1930 catalogue, Plaintiff's Exhibit 8-B.

The Special Master's report, which was adopted by the District Court, is predicated upon an entirely erroneous theory of plaintiff's patents, their function and mode of operation, as set forth by Barnhart. The Special Master has construed in effect that the Barnhart patents in suit, both of them are for the flaring of the socket at the upper end of the hosel outwardly. With respect to this alleged feature of invention as construed by the Special Master, the Special Master in his report states:

“At first glance it would appear that the flaring of the outer portion of the socket would be an obvious way in which to distribute the strain at the point of juncture of the shaft and hosel.”

[Record, p. 154.]

With respect to the second patent in suit, and claim 10 thereof, the Special Master states:

“It appears that the claim should be limited to the use of a sealing member in a structure where the shaft and socket are relatively moveable in the manner disclosed by the patent.” [Record, p. 155.]

When thus construed, clearly this claim 10 is not infringed. The effect of the report of the Special Master is to construe both the Barnhart patents as directed toward the same purported invention, *i.e.*, the flaring of the socket at the upper end of the hosel outwardly.

In defendant's structure, and in both of defendant's structures, the shaft is a driven fit, a tapered shaft in a tapered hosel bore, wherein movement of the shaft with relation to the hosel is prevented. With the prevention of this movement of the shaft, the flaring of the upper end of the hosel can have no useful purpose as compared with the disclosure of the Barnhart patents in suit. In Figure F defendant endeavors to illustrate this fact. In one illustration of Figure F is shown the structure of the Barnhart patents. In the other illustration of Figure F defendant's club of the type shown on page 4 of defendant's 1930 catalogue, Plaintiff's Exhibit 8-B, is illustrated. The point here intended to be emphasized is that without the movement of that portion of the shaft within the hosel of the club head, the flaring of the outer end of the hosel or ferrule is of no effect. Without this freedom of movement of the shaft within the chamber formed in the interior of the elongated ferrule 2 of the Barnhart patent, there will always be a concentration of bending of the shaft at the point where the shaft fits tightly at the upper

end of the ferrule. In defendant's structure this point of concentrated movement of bending of the shaft is at the line marked "A" where the shaft emerges from the driven tapered fit. The flaring of the shaft above this line A can not and does not alter this fact. This fact is proven conclusively by the fact that defendant's clubs break at this point.

"With this club Defendant's Exhibit H and of this same construction, the Wilson Company has some difficulty with shaft breakage. In most cases the shaft breaks about a quarter of an inch below the top of the hosel. By the top of the hosel I mean the very uppermost end of the hosel, not the uppermost end of the undercut portion; the uppermost end of the hosel. That quarter of an inch would be just about down where that shoulder is; that is where it generally breaks." [Record, pp. 55-56.]

"* * * There can not be any movement of the end of that shaft as it is secured to the Defendant's Exhibit H or as secured in accordance with Plaintiff's Exhibit 3 within the hosel of the club to absorb that shock or any portion of it." [Record, p. 56.]

This point illustrated by the line A in the figure illustrating defendant's structure in Figure F, does not conform to, or in any way provide for, the function of the constricted portion 2^b of the Barnhart Patents Nos. 1,639,547 and 1,639,548 in suit. The point illustrated by the line A can not form, as does the constricted portion 2^b of the Barnhart patent, a pivot point over which the shaft has a gradual bend as that portion of the shaft within the hosel 2 bends as it does in the structures of the Barnhart patents in suit. Without the undercut open chamber 2^a as illustrated in the Barnhart patents in suit,

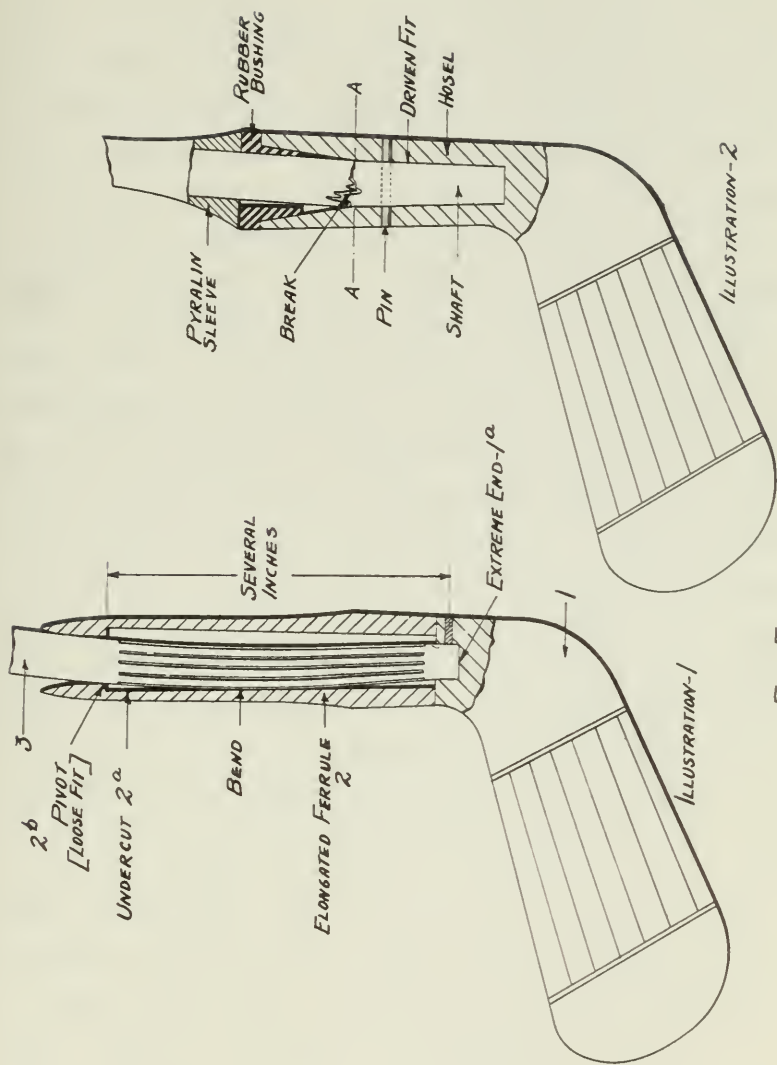


FIG. F.



the flaring of the upper end of the socket can be of no significance whatsoever. It is here that the Special Master erred in his construction of the Barnhart patents in suit. The Special Master erred in not realizing that without this undercut provision in the hosel or ferrule as illustrated in the Barnhart patent, there could be no pivotal movement of the shaft at the point illustrated at A or around a constricted portion of the hosel as called for in the Barnhart patents in suit. The Master erred in not seeing that a construction of the type utilized by defendant where there is a driven tapered fit could only result in concentration of bending of the shaft with relation to the ferrule of the golf club head at that point where the driven tapered fit between the tapered shaft and tapered bore of the hosel ends, that is, the point A. The Barnhart patent defines this constriction to be a means of providing a loose fit between the shaft and the ferrule for two purposes: one to provide a pivot point around which the shaft bends as the portion of the shaft within the interior of the hosel or long ferrule bends, and secondly, to provide a loose fit to permit the shaft to move inwardly into this chamber 2^a as the shaft in effect shortens due to the transverse bending or torsional twisting of the shaft within this chamber. It is evident from a consideration of defendant's structure that there can be no movement of the shaft within the tapered bore of the defendant's hosel. There is no loose fit provided for. There is no reason for such a loose fit. The entire function, purpose and mode of operation of defendant's structure is therefore the converse of the theoretical structure of the plaintiff's patents in suit.

Infringement is only made out where the supposed infringing structures operate through the same, or sub-

stantially the same, mode of operation; the same or substantially the same elements entering into that operation, and where those elements are combined or put together in the same manner. Identity of function, means and mode of operation is essential. Here there is no identity of means, identity of function, or identity of mode of operation. The essential element of the teaching of the Barnhart patents in suit is the constricted portion 2^b which provides a loose fit and a pivot over which the shaft bends with the freedom of movement of that portion of the shaft in the chamber 2^a of the elongated ferrule of the Barnhart patent in suit. This structure is entirely lacking in defendant's construction. In the case of *Heyl & Patterson v. M. A. Hanna Coal & Dock Co.*, 279 Fed. 862 at 864, the Court of Appeals for the Seventh Circuit said:

“We are of the view that a clamping device operating substantially in this manner is one of the essential and indispensable elements of the patented combination. This element we find wanting in appellee's device, in that the clamping action of the jaws is not effected by the weight there employed.”

As said by this court in *Riverside Heights Orange Growers Association v. Stebler*, 240 Fed. 703, at 709-10, in holding non-infringement:

“But there is a further rule also applicable to this question, and that is:

“‘If the device of the respondents shows a substantially different mode of operation, even though the result of the operation of the machine remains the same, infringement is avoided.’ *Cimiotti Unhairing Co. v. American Fur Ref. Co.*, 198 U. S. 399, 414, 25 Sup. Ct. 697, 702 (49 L. Ed. 1100).”

Defendant's Second Structure.

Defendant's second structure is illustrated by Exhibit 3 and as to this structure, the Special Master found that it did not infringe any claim in suit of either of the Barnhart patents. As to this structure, the Master in his report stated:

“Exhibit 3, which the plaintiff offers as illustrating an alleged infringing structure differs from the club Exhibit 12 and the illustration in the 1930 catalogue. Instead of a gradually flaring taper at the upper end of the socket, this club has a portion cut away leaving a well defined shoulder below which the shaft is tightly fitted. There is little or no distribution of strain as the shaft is free to bend abruptly at this point. It is the function of the combination of the patent to avoid this action. It is concluded that none of the claims of the first patent in issue are infringed by clubs of the type of Exhibit 3. A rubber bushing is interposed between the shaft and the cut out portion of the socket. It is concluded that claim 10 of the second patent is not infringed in view of the previous finding that Claim 10 is limited to the use of a rubber bushing in combination with the particular hosel construction described in the patent.”

(Report of Special Master, Page 158.)

The construction of the club of Defendant's Exhibit 3 is illustrated by Figure G of this brief. As set forth by the Special Master, the construction of this club differs only from the club illustrated on page 4 of the 1930 catalogue, Exhibit 8-B, in that the recess at the upper end of the hosel has a straight wall W as illustrated in Figure G rather than the tapered wall illustrated in the construc-

tion of the club shown in Figure E. The club head has a hosel having a tapered bore into which the complementary tapered end section of the shaft is driven to form a driven fit. A pin P is driven through the shaft and the hosel to pin the shaft in position. A rubber bushing B is mounted in the recess in the upper end of the hosel between the hosel and the shaft. The function and purpose of this rubber bushing is to exclude dirt and moisture.

No appeal or cross appeal is taken with respect to the holding in the decree that this structure of Plaintiff's Exhibit 3 does not infringe any claim of the first Barnhart Patent No. 1,639,547. The cross appeal taken with respect to this structure seeks only a review of the Special Master's finding, and the court's decree, that this structure of club as illustrated by Plaintiff's Exhibit 3 does not infringe claim 10 of the second Barnhart Patent No. 1,639,548. The construction which plaintiff would place upon this claim 10 is that this claim 10 is a claim directed to use of a rubber bushing or washer for the purpose of excluding moisture and dirt. Any other construction placed upon claim 10 of the second Barnhart patent clearly shows that there is no infringement. With the claim construed as plaintiff desires to construe it, it is obvious that the claim defines no invention and is invalid. How at this stage of development of the art it can be considered by any one that invention resides in the use of a rubber washer to exclude moisture and dirt is beyond defendant's comprehension. Examination of the Barnhart Patent No. 1,639,548 shows that the Barnhart patent teaches that a wrapping or sleeve upon the outside of the hosel of the golf club and the outside of the shaft is equivalent to the use of a rubber washer within the recess formed between

the hosel and the shaft. In this Barnhart patent the illustration of the rubber moisture and dirt excluding member is of a sleeve 5 (Figure 6) which fits upon the exterior of the elongated ferrule 2 and around the shaft 3 at the point where the shaft 3 emerges from the elongated ferrule 2. This construction is particularly defined by Barnhart in his specification on page 2, lines 101-114, after which the specification of this second Barnhart patent includes the statement:

“It will be noted that a similar sleeve may be positioned around the joints of the ferrules and shafts shown in Figures 3, 4 and 5, or a cap, or washer may be positioned within the end of the ferrule around the shaft.”

(Barnhart Patent No. 1,639,548, p. 2,
lines 116-119.)

The only function attributed to the rubber sleeve 5 is to exclude dirt, dust and grit from entering the ferrule and lodging between the same and the shaft, thus preventing proper coaction between the same. (Barnhart Patent No. 1,639,548, p. 2, lines 104-108.) What is meant in this portion of the specification by “coaction between the ferrule and the shaft” can only have reference to the movement permitted between the shaft and the hosel by the provision of the undercut chamber 2^a whereby freedom of movement of the portion of the shaft within this undercut chamber 2^a is provided for. Obviously if this chamber 2^a fills up with dirt, dust and grit it might so fill with these foreign matters as to prevent the free twisting of the shaft or the free bending of the shaft within this undercut chamber. If it was merely a driven fit as provided for in defendant’s structure, the

only result of admission of water, dirt or dust would be to prevent the free withdrawal of the shaft from the hosel when it is necessary or desirable to substitute a new shaft in the hosel of the club head. Even without any art which specifically illustrates the use of a rubber bushing for the exclusion of moisture, dust or grit, it is obvious that in the state of the arts as now developed that no invention could be involved. It was to these particular types of alleged changes that the Supreme Court of the United States referred when stating that "not every improvement in an article is patentable". *Burt v. Ivory*, 133 U. S. 349, 359.

Prior Patented Art.

The prior patented art relied upon by defendant shows conclusively that the Barnhart patents in suit are devoid of invention. These patents include the patents to

Robertson,	No. 206,264,	July 23, 1878,	Exhibit J-1
Kavanaugh,	No. 603,694,	May 10, 1898,	Exhibit J-2
Lard,	No. 1,249,127,	Dec. 4, 1917,	Exhibit J-3
Isham,	No. 1,435,851,	Nov. 14, 1922,	Exhibit J-4
Lagerblade,	No. 1,444,842,	Feb. 13, 1923,	Exhibit J-5
Treadway,	No. 1,531,632,	Mar. 31, 1925,	Exhibit J-6
Heller,	No. 1,551,563,	Sept. 1, 1925,	Exhibit J-7
Heller, Reissue	No. 16,808,	Dec. 6, 1927,	Exhibit J-8
Maas,	No. 1,553,867,	Sept. 15, 1925,	Exhibit J-9
Reach, et al.,	No. 1,601,770,	Oct. 5, 1926,	Exhibit J-10
Mattern,	No. 1,605,552,	Nov. 2, 1926,	Exhibit J-11
Pryde,	No. 1,615,232,	Jan. 25, 1927,	Exhibit J-12
British Pat. to	Saunders, No. 3288	of 1913,	Exhibit J-13

The claims alleged to be infringed are claims 11 and 12 of the Barnhart Patent No. 1,639,547, and claim 10

of the Barnhart Patent No. 1,639,548. These claims read:

11. In a golf club, a head member provided with a socket and with a shaft, the latter being secured at its one end within the inner portion of the socket, the portion of the shaft near the outer end of said socket being freely movable within and relative to and about the outer end portion of said socket to prevent buckling of said shaft at the outer end of the socket.

12. In a golf club, a head member provided with a socket and with a shaft, the latter being secured at its one end within the inner portion of the socket, the bore at the outer end of said socket being outwardly divergent forming a fulcrum about which said shaft is flexed longitudinally when striking a ball with the golf club.

10. In a golf club, a head having a socket, a shaft secured at one end within said socket, the portion of the shaft within the outer end of the socket being movable relative to the latter, and a flexible sealing member positioned at the joint between the outer end portion of said socket and said shaft.

The Barnhart patent in suit attempts to broadly cover a change which is not an improvement. Even if this change be considered to be an improvement, it is not an improvement rising to the dignity of invention. The Master in his report shows that he did not consider the question of invention, but considered this entire matter as a matter of abstract research without regard to the question of what is invention. The Master found that merely because the feature of flaring the upper end of the elongated ferrule is not in its identical shape shown in the prior art patents in its minutia, the patents and both

of them must be addressed to this feature, and that invention was therein embodied. In making this finding the Master of necessity did not consider the wording of the claims alleged to be infringed, the mode of operation ascribed to the structures disclosed in the patents in suit or whether or not that mode of operation was common to the defendant's structure.

Although neither claim 11 or 12 of the first Barnhart patent, nor claim 10 of the second Barnhart patent, is in any way directed to the flaring of the upper portion of the elongated ferrule, the Master concluded that this was the invention defined in these claims. The Master in his report states:

“At first glance it would appear that the flaring of the outer portion of the socket would be an obvious way in which to distribute the strain at the point of juncture of the shaft and hosel. However, an examination of the prior art patents does not disclose any suggestion of such a construction.”

[Report of Special Master, p. 154.]

In order to properly construe these claims asserted to be infringed both with reference to the showings made by the prior patented art and as to the question of infringement, it is necessary to consider these claims in the light of the specification of the Barnhart patents and likewise with respect to the representations made to the Patent Office with reference to these claims.

In the first Barnhart Patent No. 1,639,547, claims 11 and 12 were first submitted to the Examiner for his consideration in the amendment, Paper 3, dated January 14, 1927, Defendant's Exhibit D. These claims were sub-

mitted to the Commissioner of Patents as claims 16 and 17. With respect to these claims as they were added to the specification, Barnhart made the following representations to the Patent Office:

“The added claims 16 to 21, inclusive, have been drawn specifically to the construction of the ferrule, namely, to the pivot portion, or outwardly divergent portion at the outer end of the ferrule, and also to the under cut portion to permit flexion of the portion of the shaft within the ferrule.”

“Claim 16 defines the club as having a head member provided with a socket and with a shaft, the latter being secured at its one end and within the inner portion of the socket, the portion of the shaft near the outer end of the socket being freely movable within and relative to and about the outer end portion of the socket to prevent buckling of the shaft at the outer end of the socket. This is not shown, nor remotely suggested by the art cited.

“Claim 17 defines the ferrule as being outwardly divergent forming a fulcrum for the shaft. This also is not shown by the art of record.”

(Defendant's Exhibit D, Paper 3,
Amendment A, dated
January 14, 1927.)

As these claims were added, it is therefore represented to the Patent Office that the claims were directed to the combination of the pivot portion provided by the pivot 2^b and the undercut portion 2^a of the elongated ferrule 2

“to permit flexion of the portion of the shaft within the ferrule.”

(File wrapper, Exhibit D, *supra*.)

A fulcrum, the term applied to the pivot 2^b by Barnhart in this explanation of his invention, is an intermediate point on a lever around which the two opposing portions of the lever on opposite sides of the fulcrum may rotate. The intermediate rest of the board of a teeter-toter is such a fulcrum. A fulcrum as thus defined of necessity implies that the shaft 3 of the Barnhart patent has freedom of movement upon each side of the fulcrum. These representations made to the Patent Office and upon which the Patent Office granted the claims here involved can not be disregarded. The asserted mode of operation set forth to the Patent Office and upon which the allowance of these claims by the Patent Office was based can not be disregarded in the present construction of the claims in order that these claims may be interpreted to be infringed by the structure which does not employ said mode of operation.

Lorraine v. Townsend, 290 Fed. 54 (C. C. A. 9th Cir.);

Wilson & Willard Mfg. Co. v. Union Tool Co., 249 Fed. 729, 735 (C. C. A. 9th Cir.);

Warren Bros. Co. v. Thompson, 293 Fed. 745 (C. C. A. 9th Cir.);

Knick v. Bowes Co., 25 Fed. (2d) 442 (C. C. A. 8th Cir.);

White v. Dunbar, 119 U. S. 47, 52;

Hennebique Const. Co. v. Urban Co., 182 Fed. 496, 498 (C. C. A. 8th Cir.);

George E. Lee Co. v. Fortified Mfg. Co., 284 Fed. 315, (C. C. A. 8th Cir.);

I. T. S. Rubber Co. v. Essex Co., 272 U. S. 429, 443, 71 L. Ed. 335, 342;

Niblo Mfg. Co. v. Prcston, 39 Fed. (2d) 604 (C. C. A. 2nd Cir.);

Quick Action Ignition Co. v. Maytag Co., 39 Fed. (2d) 595, 597 (C. C. A. 8th Cir.).

“* * * an express statement in a claim, which is in accord with the specifications and drawings, can not be construed to mean something different, nor can it be reconstructed so as to eliminate the limitations indicated in the specifications and drawings and shown by the literal meaning of the claim * * *.”

Neva-Slip Shirt Waist Grip Co. v. Marcon Co., 215 Fed. 117.

In *Stuebing Truck Co. v. Olson*, 291 Fed. 63, at 66 (C. C. A. 7th Cir.), the court says:

“The patent was obtained upon the representation that the structure was so constructed as to ‘force the operator to gain control of the load at all times, before raising or lowering the load.’ We have not deemed it necessary to refer to the prior art to confirm this conclusion, because the patent and the file wrapper are so conclusive as to require no such corroboration.”

In *Donchian v. Kingston*, 138 Fed. 895, it is said:

“It would be unjust to the public, and to all the parties involved in the construction of the patent if a patentee were allowed to ‘understandingly and deliberately’ limit the scope of his patent while he is obtaining it, and were afterwards allowed to escape from his limitation when the patent is construed. He ought not to be heard to demand one rule of interpretation in the Patent Office and another in the

courts. The ordinary principles relating to the interpretation of a contract are the principles which prevail in construing a patent. The understanding of parties to an agreement at the time it is made is always held to be of importance in the construction of such agreement. Courts often find aid in construing a contract by considering what the parties have said and what they have done when the contract was made.”

As said by the Circuit Court of Appeals of the Sixth Circuit in *Dowagiac Mfg. Co. v. Superior Drill Co.*, 115 Fed. 886, at end of 896:

“* * * whatever doubt there might have been as to whether the claim was limited in the construction of its language by the specification, *it was removed by the limitation which he put upon it by his explanation*, the consequence of which was the allowance of his patent; *and the claim must be read as limited in this respect* in the same way as are the other claims.” (Italics ours.)

As said by this Court in *Hauser v. Simplex Window Co.*, 10 Fed. (2d) 457, at 460:

“The art is quite old, and it was to avoid references that the applicant limited the claim to a structure with a friction shoe contiguous to the corner of the sash; and, having limited his claim in order to obtain his patent, he is not now in a position to claim a construction that he might have had if limitations and restrictions were not in the claims. *Computing Scale Co. v. Automatic Scale Co.*, 27 S. Ct. 307, 204 U. S. 609, 51 L. Ed. 645; *Fullerton Walnut Growers' Association v. Anderson-Barngrover Mfg. Co.*, 166

F. 443, 92 C. C. A. 295; *Selectasine Patents v. Prest-o-graph Co.* (C. C. A.), 282 F. 223. We must, therefore, look upon claim 1 as limited to a structure wherein the frictional element is a yieldably mounted shoe placed in the upper end of the sash contiguous to the corner thereof, and engaging slidably the guide in the upper part of the frame. Nor do we regard Hauser's pivot as equivalent to Soule's friction shoe. While the two devices use frictional means in obtaining the ultimate result, they do not operate in substantially the same manner."

Barnhart did not invent the use of a steel shaft in a golf club. This was not invention, but even if it were, Barnhart admits that this was old prior to his alleged inventions. The first Barnhart Patent No. 1,639,547, says:

"In golf clubs now in use, the shafts are made of wood as well as of steel tubing."

(Barnhart Patent No. 1,639,547, p. 1, lines 4-5.)

Barnhart did not invent the placing of the shaft end into a bore formed in the hosel or ferrule of the club head. The patents to Lard, No. 1,249,127, Exhibit J-3, Book of Exhibits, page 38; Robertson, No. 206,264, Exhibit J-1, Book of Exhibits, page 31, and each of Exhibits J-5 to J-13, inclusive, illustrate this method of inserting the shaft end into the bore of the club head hosel.

Barnhart did not invent the making of the shaft movable at the outer end of the socket into which the club head is fitted. The patent to Lard, No. 1,249,127, Exhibit J-3, Book of Exhibits, pages 37 to 42, discloses this movability of the shaft at the outer end of the socket for

the purpose of absorbing strains and reducing localization of the strain in the shaft at this point. As said by Lard in his specification, page 2, lines 83-93:

“A neck constructed by the use of washers or the like absorbs, to a certain extent, or degree, any tendency for the shaft to break at its point of entrance into the tubular socket member. Furthermore, such washers tend in a great measure, to prevent moisture from getting into and around the socket. When rubbed down and shellacked, the leather washers become substantially water-proof, and in fact they may be waterproofed before being positioned.”

The patent to Isham, No. 1,435,851, Exhibit J-4, Book of Exhibits, pages 44-47, inclusive, illustrates the manner of securing a handle or shaft 2 to a head 1 by interposing between the shaft 2 and the head 1 a rubber sleeve 4^a so that a yielding movement is permitted between the shaft 2 and the head 1 within the rubber lined socket.

The patents to Heller, No. 1,551,563, Exhibit J-7, and the Reissue patent to Heller, No. 16,808, Exhibit J-8, Book of Exhibits, pages 57-63, inclusive, illustrate the connection of a tapered golf shaft 4 and the hosel 5 of the club 3 by forcing the tapered shaft through a sleeve of rubber 7, which rubber 7 fills the cavity or chamber provided between the bore of the hosel 5 and the exterior of the shaft 4. The rubber sleeve 7 extends above the flared upper end of the hosel of the golf club head 3 and as set forth particularly in the Reissue Patent No. 16,808, this construction provides for the desired vertical torsional or horizontal displacement under impact of the shaft 4 with reference to the club head 3. Heller in his Reissue Patent No. 16,808, page 1, lines 31-43, states:

“The improved construction and mounting of the head upon the shaft thus afforded provides for additional resiliency at the region of the lower end of the shaft and is particularly desirable in its association with a hollow steel shaft as illustrated. In the latter use there is introduced an advantageous elastic rebound of the head portion relative to the shaft from both vertical and torsional or horizontal displacement under impact, this torsional resiliency being to a large degree lacking in steel shaft clubs at present used.”

The sleeve 7 is of rubber as set forth by Heller:

“In the preferred embodiment of my invention, the resilient or rubber sleeve 7 is of suitable thickness to provide, upon forcing of the shaft within the bore,
* * *” (Heller Reissue Patent No. 16,808,
p. 1, lines 88-91.)

The sleeve 7 extends beyond the upper end of the flared portion of the hosel and when thus extended, prevents the admission of water, dirt, grit, dust, or other foreign matter into the hosel 5 of the club head 3.

“The resilient sleeve is here illustrated at 7 and extends from the lower end of the bore upwardly for the full length of the bore and projects for a small distance therebeyond.”

(Heller Reissue Patent No. 16,808,
p. 1, lines 77-81.)

The patent to Pryde, *et al.*, No. 1,615,232, Exhibit J-12, Book of Exhibits, pages 79-81, inclusive, illustrates the securing of a tapered shaft into the tapered bore of the hosel of a golf club head 18 by means of pins or rivets 19 passed through the hosel and through the tapered shaft 10.

Interposed between the tapered shaft 10 and the inner bore of the hosel is a rubber sleeve 11 which, as set forth by Pryde, may extend the entire length of the shaft 10 or not, as desired. Pryde's object, as set forth in his specification, is:

“Our invention is designed to overcome these and other objections to the metal shaft golf club. This desirable end is accomplished by encircling the tubular metal shaft with an outer shell of vulcanized rubber which has a less degree of flexibility than the tubular metal shaft. Thus we have found by experiment, that in a shaft constructed in the manner indicated that the force of the blow or impact against the ball is absorbed in the shaft and does not reach the hands of the player but is mellowed or blended in very much the same manner as in a shaft constructed of wood.”

(Pryde, *et al.*, Patent No. 1,615,232,
p. 1, lines 41-49.)

The rubber sleeve illustrated by Pryde, *et al.*, likewise eliminates the necessity of windings at the joint between the hosel of the club head and the shaft, and obviously acts to prevent the admission of moisture, dust, dirt or grit into the hosel of the club head. Pryde, *et al.*, state:

“The shell 11 is also enlarged at 20 to form a shoulder 21, which abuts against the upper face of the metal head and forms a rigid joint therebetween, thus obviating the necessity of a wooden shell, as heretofore, and the necessary waxed winding cord therefor, thus a very strong joint is made between the shaft and the head without adding any material weight to the club.”

(Pryde, *et al.*, Patent No. 1,615,232,
p. 2, lines 7-15.)

The Robertson Patent No. 206,264, of July 23, 1878, Exhibit J-1, Book of Exhibits, pages 31-33, inclusive, illustrates the manner of securing a shaft A to a head or handle B in such a manner as to distribute the strain and prevent localization of the strain of bending or twisting at the point of emergence of the shaft A from the head B. As is true of the Barnhart patents, Robertson illustrates his head as undercut at C and provides a yieldable fulcrum means at G. The shaft A is secured to the head B at its extreme end E. Thus the strains of bending and twisting are distributed over the length of the shaft and not concentrated at the point of emergence of the shaft A from the head B. The yieldable member G as illustrated by Robertson is formed of India rubber and of the characteristics of bending of the shaft A, Robertson states:

“The bore or inclosure *c* is of larger diameter in its center than at its ends—that is to say, is elliptical in shape—in order that when the piece *a* is bent into a curved form by the strain upon the rod this curve shall extend from end to end, as the bore of the handle *b* is sufficiently large to permit of this.”

(Robertson Patent No. 206,264, p. 1,
last paragraph of column 1.)

The prior art patents illustrate that each and every claimed feature of the Barnhart patents was old and common in the art long prior to Barnhart's alleged invention, and unless therefore we disregard, (as is necessary in order to construe these claims to be infringed by defendant's structures, or either of them,) the necessary limitations of the claims asserted to be infringed, these claims are invalid. Even considering these claims in their most limited character, they are clearly devoid of inven-

tion in view of the teachings of these prior art patents of the same manner of mounting a club head and shaft to obtain the same results asserted to be obtained by Barnhart through the use of his theoretical structure disclosed in the patents in suit.

Barnhart did not invent, as is shown by these prior art patents, the connecting of a club shaft and head by a driven fit where the club head is pinned to the shaft to prevent the driven fit loosening. He did not invent the provision of a means such as a rubber washer or sleeve at the point of the emergence of the club shaft from the hosel of the club head to either absorb shock, distribute the strain, or to prevent the admission of moisture, dirt, dust or grit into the hosel of the club head around the shaft. Both the patents to Lard, No. 1,249,127, Exhibit J-3, and the patent to Robertson, No. 206,264, Exhibit J-1, illustrate each of these features in a single construction. As set forth by the Supreme Court in *Atlantic Works v. Brady*, 107 U. S. 192, 27 L. Ed. 438, 440:

“The process of development in manufactures creates a constant demand for new appliances, which the skill of ordinary head workmen and engineers is generally adequate to devise, and which, indeed, are the natural and proper outgrowth of such development. Each step forward prepares the way for the next, and each is usually taken by spontaneous trials and attempts in a hundred different places. To grant to a single party a monopoly of every slight advance made, except where the exercise of invention, somewhat above ordinary mechanical or engineering skill, is distinctly shown, is unjust in principle and injurious in its consequences.

“The design of the patent laws is to reward those who make some substantial discovery or invention, which adds to our knowledge and makes a step in advance in the useful arts. Such inventors are worthy of all favor. It was never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures. Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith.”

As said in *Smith v. Nichols*, 21 Wall. 112, 119, 22 L. Ed. 566, and cited with approval by this Court in *D. J. Murray Co. v. Sumner I. Works*, 300 Fed. 911, 912:

“But a mere carrying forward or new or more extended application of the original thought, a change only in form, proportions, or degree, the substitution of equivalents, doing substantially the same thing in the same way by substantially the same means with better results, is not such invention as will sustain a patent.”

Defendant's clubs do not infringe. Claims 11 and 12 of the Barnhart Patent No. 1,639,547, even if construed to be valid, can not be construed to be infringed by defendant's club of the form illustrated on page 4 of Plaintiff's Exhibit 8-B, or as illustrated in Figure F hereto. A claim of a patent must be construed as found and it is contrary to the settled rule of Patent Law to imply as elements of a claim parts not therein designated for the purpose of according novelty to the claims or for the purpose of construing the claims to be infringed. Chief Justice Taft, while Circuit Judge, in speaking for the Court of Appeals for the Sixth Circuit in *Frederick R. Stearns & Co. v. Russell*, 85 Fed. 218, 224, says:

“To imply as elements of a claim parts not named therein for the purpose of limiting its scope, so that it may be accorded novelty, is contrary to a well-settled rule of the patent law. It was proposed to limit a claim thus in *McCarty v. Railroad Co.*, 160 U. S. 110, 116, 16 Sup. Ct. 240. The patent there under consideration was for a car truck bolster. Mr. Justice Brown, in delivering judgment for the supreme court, said (page 116):

“‘There is no suggestion in either of these claims that the ends of the bolster rest upon springs in the side trusses, although they are described in the specification and exhibited in the drawings. It is suggested, however, that this feature may be read into the claims for the purpose of sustaining the patent. While this may be done with a view of showing the connection in which a device is used, and proving that it is an operative device, we know of no principle of law which would authorize us to read into a claim an element which is not present, for the purpose of making out a case of novelty or infringe-

ment. The difficulty is that if we once begin to include elements not mentioned in the claim in order to limit such claim, and avoid a defense of anticipation, we should never know where to stop. If, for example, a prior device were produced exhibiting the combination of these claims plus the springs, the patentee might insist upon reading some other element into the claims, such, for instance, as the side frames and all the other operative portions of the mechanism constituting the car truck, to prove that the prior device was not an anticipation. It might also require us to read into the fourth claim the flanges and pillars described in the third. This doctrine is too obviously untenable to require argument.’ ”

As said in *Great Western Co. v. Lowe*, 13 Fed. (2d) 880, at 884, in applying this rule that a patentee is bound by his claims as written, and the court cannot read limitations into them to save them from anticipation:

“If an inventor were permitted to obtain broad claims, and thereafter write in such limitations as are necessary to avoid the prior art, but still cover an alleged infringing structure, the public would never be certain as to the meaning of a claim, and endless confusion and litigation would result.”

The Special Master, contrary to this established rule, read into claim 11 of the first Barnhart Patent No. 1,639,547, and claim 10 of the second Barnhart Patent No. 1,639,548, the limitations that the upper end of the socket is flared outwardly:

“As before noted the claims of the first patent in issue are limited to the flared end portion of the

socket which functions to lessen the strain on the shaft at the point of juncture with the hosel. * * * The claim of the second patent in issue is directed to the combination of a flexible bushing and the flared socket without regard to the slotted shaft.”

[Report of Special Master, p. 154.]

Claim 11 does not in any of its terms call for the socket being flared outwardly. Claim 10 does not in any of its terms call for the socket being flared outwardly. The Special Master correctly construes these claims as being anticipated without this limitation, and even with the limitation, states that it is doubtful as to whether these claims define patentable novelty. [Special Master’s Report, Record, p. 154.]

Claims 11 and 12 of the first patent as heretofore pointed out were allowed by the Commissioner of Patents upon the argument made by Barnhart that these claims were limited to the securing of the shaft at its one end within the socket formed in the hosel of the club, and the provision of the pivot or fulcrum means at the opposite end of the hosel wherein the shaft is permitted to bend in the undercut portion 2^a of the elongated ferrule 2. The Special Master disregarded the positive limitations of claims 11 and 12 in this respect in order to construe the claims to be infringed by defendant’s structure as illustrated in Figure E hereof, and as illustrated on page 4 of the catalogue, Plaintiff’s Exhibit 8-B. Claim 11 calls for the shaft being secured at its one end within the inner portion of the socket. As set forth in the specifications of the Barnhart patent, this means the extreme end. The extreme end is in some point positioned several inches up the length of the shaft away from the extreme end. It

was pointed out to the Examiner in the allowance of this claim that the word "socket" as employed in this claim referred to the under cut portion 2^a as illustrated in the drawings of this Barnhart patent. When these claims were presented to the Patent Office they were presented with the statement that they were drawn specifically to the construction of the ferrule and

"also to the under cut portion to permit flexion of the portion of the shaft within the ferrule."

The Special Master in construing this claim to be infringed, entirely disregarded this express limitation of claim 11. Further, the Special Master in construing claim 11 to be infringed disregarded that latter portion of the claim which requires that the shaft is so movable about the pivot or restricted portion of the socket as to prevent buckling of the shaft at the outer end of the socket. The evidence clearly establishes that this is the particular point where the shafts of defendant's clubs broke. The defendant's structure, therefore, does not have that mode of operation as required by claim 11 of preventing buckling of the shaft at the outer end of the socket.

Claim 12, in addition to including the limitations set forth in connection with claim 11, defines that the structure of the Barnhart patent includes a fulcrum about which the shaft is flexed when striking a ball with a golf club. A fulcrum is defined:

"2. mech. The support, as a wedge-shaped piece or a hinge, about which a lever turns."

(Webster's New International
Dictionary.)

Its simple illustration is, as hereinabove set forth, the support upon which the board of a teeter-toter rotates. As used in connection with claim 12, and in connection with the disclosure made in the Barnhart patent, it means the point around which the shaft rotates as the portion of the shaft within the undercut 2^a bends as illustrated in the illustration of this Barnhart structure in Figure F. It has no significance whatsoever unless it is construed in connection with the illustration of the bending of the shaft 3 within the under cut 2^a. Further than this, the claim 12 specifically calls for the fulcrum being the point about which the shaft 3 flexes when the club head strikes a ball. It is necessary to totally disregard this limitation of claim 12 as well as the representations made to the Patent Office with respect to what claim 12 was intended to define in order to hold that claim 12 is infringed by the structure of club illustrated on page 4 of the 1930 catalogue, Plaintiff's Exhibit 8-B.

Claim 10 of the second Barnhart patent defines that the shaft is secured at its end within the socket. It is necessary to disregard this definite limitation of this claim in order to conclude that this claim is infringed by defendant's structure. It is necessary to disregard what is meant by these terms as set forth in the specification of the Barnhart patent in order to conclude that the defendant's structure of Plaintiff's Exhibit 3 infringes this claim. The specifications of the second Barnhart Patent No. 1,639,548, leave no room to question what is meant by this expression wherein the specification states:

“The small end of the shaft is positioned within the ferrule and the extreme end of the reduced portion is secured to the shank end of the head to which the ferrule is connected.”

(Barnhart Patent No. 1,649,548, p. 1,
line 110, to p. 2, line 2.)

It will be impossible to more definitely define this point of connection of the shaft and head than was done by Barnhart. The extreme end of the shaft not only means the absolute shaft end, but is also set forth as being the point at which the elongated ferrule 2 is secured to the club head 1, *i. e.*, the extreme end of the ferrule 2. As illustrated in Figure 4, this is the point beyond the undercut 2^a of the ferrule 2 and below the weakened portion of the shaft formed by the formation of the helical or spiral slots 3^a.

Contrary to the limitations of the claims as hereinabove set forth, the defendant's structures include a tapered shaft driven into a tapered bore and pinned into position, forming one of the most positive forms of connection known to mechanics. No movement is permitted or can take place between the shaft and the hosel of the club head within such a tapered driven fit. As is common to all clubs, the shaft therefore bends at the point where the shaft emerges from the tapered fit. The strain of bending is localized at this point with the result that breakage of the shafts in defendant's structures occurs at this point. There is therefore no similarity in means or the instrumentalities used in making the connections between the

shaft and the club head and as compared between the illustration of plaintiff's patent and defendant's structures. There is no fulcruming or bending of a lever over a fulcrum; there is no free movement of the shaft within the undercut chamber of a hosel; the shaft is not weakened within the hosel to permit of greater torsional or longitudinal flexibility of the shaft, and the shaft is not secured at its one end to the club head in order to permit of this bending or flexing of the club to distribute the strain at the point of emergence of the shaft from the hosel of the club head. The mode of operation set forth for the club of the Barnhart patent is not found in the defendant's structures, or either of them. The asserted function performed through the use of the instrumentality set out in connection with the Barnhart patent is not attained through the use of defendant's clubs.

The rule of law applicable to the question of infringement as applied by this Honorable Court in *Eaid v. Twohy Bros. Co.*, 230 Fed. 444, is:

“Being a mere improvement on the prior art, McConnell is only entitled to the precise devices described and claimed in his patent, and if the devices embodied in the Chandler patent can be differentiated, it is clear that the charge of infringement cannot be maintained. Such is the well-established law. *Kokomo Fence Machine Co. v. Kitselman*, 189 U. S. 8, 23 Sup. Ct. 521, 47 L. Ed. 689; *Boyd v. Janesville Hay Toll Co.*, 158 U. S. 260, 15 Sup. Ct. 837, 39 L. Ed. 973; *Railway Co. v. Sayles*, 97 U. S. 554, 24 L. Ed. 1053; *McCormick v. Talcott*, 20 How. 402, 15 L. Ed. 930.”

Conclusion.

Appellant and cross-appellee therefore submits:

1. That the respective claims of the Barnhart patents in suit relied upon are void because each of them is anticipated.
2. That the respective claims of the Barnhart patents in suit relied upon are void as not defining invention.
3. That there is no infringement. The defendant's clubs do not embody the same combination of elements having the same mode of operation or functioning in the same manner as is inherent in the structures disclosed in the Barnhart patents in suit, and therefore there can be no infringement.

Appellant and cross-appellee therefore submits that this Court should pronounce the claims of the Barnhart patents in suit to be void and that the structures of the golf clubs as manufactured by defendant do not infringe.

Respectfully submitted,

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